GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: January 10, 2003, 02:42:20 ; Search time 73.5 Seconds
(without alignments)
765.058 Million cell updates/sec

Title: US-09-674-035A-2
Perfect score: 2263
Sequence: 1 MYRPDVVRARKRVCWEPWVI.....PGVYTRVTALRDWITSKTGI 422

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	2255	99.6	422	21	AAY94708	Human DESC1 protei
2	2255	99.6	422	23	AAE18723	Human DESC1-like s
3	2255	99.6	423	21	AAY99414	Human PRO1461 (UNQ
4	2255	99.6	423	22	AAU29183	Human PRO polypept
5	2255	99.6	423	22	AAU01344	Human TANGO 361 am
6	2255	99.6	423	22	AAB87578	Human PRO1461. Ho
7	2255	99.6	423	22	AAB66163	Protein of the inv
8	2252	99.5	423	22	AAU01400	Human TANGO 361, v
9	2252	99.5	423	22	AAU01401	Human TANGO 361, v
10	2252	99.5	423	22	AAU01402	Human TANGO 361, v
11	2251	99.5	423	22	AAU01399	Human TANGO 361, v
12	2235	98.8	422	21	AAY94709	Human DESC1 protei
13	2232	98.6	422	22	AAE01946	Human endotheliase
14	2169	95.8	407	23	AAO21900	Homologous human p
15	1263	55.8	233	22	AAE01942	Human endotheliase
16	943	41.7	405	23	AAO21899	Protein of human p
17	903	39.9	418	23	ABB06972	Guinea pig AST pro
18	896	39.6	418	23	ABB06969	Canine AST protein
19	883	39.0	425	23	AAU82734	Amino acid sequenc
20	878	38.8	413	22	AAB85039	Human SER5 protein
21	877.5	38.8	417	23	ABB06973	Hamster AST protei
22	873	38.6	418	23	ABB06971	Rabbit AST protein
23	868.5	38.4	447	23	AAU82751	Amino acid sequenc
24	863	38.1	418	23	ABB06967	Porcine AST protei
25	855.5	37.8	417	23	ABB06970	Bovine AST protein
26	850	37.6	418	23	ABB06968	Macaca fasciculari
27	847	37.4	418	17	AAR89435	Trypsin-like enzym
28	847	37.4	418	20	AAY29501	Human lung tumour
29	847	37.4	418	20	AAY29502	Human lung tumour
30	847	37.4	418	21	AAB44437	Human lung tumour-
31	847	37.4	418	21	AAB44438	Human lung tumour-
32	847	37.4	418	22	AAE13778	Human lung tumour-
33	847	37.4	418	22	AAE13779	Human lung tumour-
34	847	37.4	418	22	AAE06941	Human airway tryps
35	847	37.4	418	23	ABB06964	Human airway speci
36	847	37.4	418	23	ABB77355	Human AST SEQ ID N
37	847	37.4	418	23	AAU76372	Human airway tryps
38	846	37.4	418	20	AAY29498	Human lung tumour
39	846	37.4	418	21	AAB44428	Human lung tumour-
40	846	37.4	418	22	AAE13769	Human lung tumour-
41	835.5	36.9	417	23	ABB06965	Mouse airway speci
42	835.5	36.9	417	23	ABB77356	Mouse AST SEQ ID N
43	835	36.9	449	22	ABG27792	Novel human diagno
44	816	36.1	416	22	AAG79214	Amino acid sequenc
45	816	36.1	416	22	AAB47566	Protease PRTS-8.

ALIGNMENTS

RESULT 1
AAY94708
ID AAY94708 standard; Protein; 422 AA.
XX
AC AAY94708;
XX
DT 01-DEC-2000 (first entry)
XX
DE Human DESC1 protein variant #1.
XX
KW Human; DESC1; squamous cell carcinoma; prostate cancer; head; neck;
KW diagnosis; chromosome 4q12-4q13.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 19..37
FT /note= "Hydrophobic transmembrane region"
FT Cleavage-site 190..191
FT Domain 191..422
FT /note= "Catalytic domain"
XX
PN WO200050061-A1.
XX
PD 31-AUG-2000.
XX
PF 11-NOV-1999; 99WO-IB01818.
XX
PR 26-FEB-1999; 99US-0122747.
XX
PA (OHIS) UNIV OHIO STATE RES FOUND.
XX
PI Lang JC;

XX
DR WPI; 2000-572035/53.
DR N-PSDB; AAA28125.
XX
PT Diagnosing squamous cell carcinoma or prostate cancer especially
PT squamous cell carcinomas of head and neck and tissues adjacent to such
PT tumor tissue comprises assaying for the expression of DESC1 gene -
XX
PS Claim 8; Fig 1A; 32pp; English.
XX
CC This invention relates to a method for the diagnosis of squamous cell
CC carcinoma or prostate cancer, comprising assaying for the expression of
CC the DESC1 gene in the tissue sample from a subject. The present sequence
CC represents the human DESC1 protein variant 1. The human DESC1 gene is
CC located on chromosome 4q12-4q13, and the DESC1 protein has a predicted
CC molecular weight of 44kD. The DESC1 gene is expressed in significant
CC levels in epithelial derived tissue of the head, neck, oral mucosa,
CC tonsils, prostate, testes and skin in healthy individuals. Tissue samples
CC from patients with squamous cell carcinoma (particularly of the head and
CC neck) do not express, or expresses at low levels the DESC1 gene.
CC Expression of the DESC1 gene is reduced or absent in prostate cancer.
CC The DESC1 protein shows homology to serine protease family members. The
CC methods of the invention can be used to diagnose squamous cell carcinoma
CC or prostate cancer in a tissue sample of a subject. The DESC1 cDNA is
CC useful for producing DESC1 protein and for designing hybridization probes
CC for isolating and identifying cDNA clones and genomic clones encoding the
CC protein or its allelic forms.
XX
SQ Sequence 422 AA;

Query Match 99.6%; Score 2255; DB 21; Length 422;
Best Local Similarity 99.5%; Pred. No. 1.1e-178;
Matches 420; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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Db      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
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Db     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
          |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 240

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
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Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
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Qy     421 GI 422
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Db     421 GI 422
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RESULT 2
AAE18723
ID AAE18723 standard; Protein; 422 AA.
XX
AC AAE18723;
XX

DT 17-MAY-2002 (first entry)
XX
DE Human DESC1-like serine protease homologue.
XX
KW Human; DESC1-like serine protease; chronic obstructive pulmonary disease;
KW COPD; cancer; cardiovascular disease; nervous system disease; arrhythmia;
KW congestive heart failure; myocardial infarction; ischaemic disease;
KW hypertensive vascular disease; peripheral vascular disease; enzyme.
XX
OS Homo sapiens.
XX
PN WO200206453-A2.
XX
PD 24-JAN-2002.
XX
PF 09-JUL-2001; 2001WO-EP07859.
XX
PR 18-JUL-2000; 2000US-218832P.
XX
PA (FARB) BAYER AG.
XX
PI Ramakrishnan S;
XX
DR WPI; 2002-188540/24.
XX
PT Novel purified human DESC1-like serine protease, useful for identifying
PT modulators of enzyme activity to treat cancer, chronic obstructive
PT pulmonary disease, cardiovascular, peripheral/central nervous system
PT disease -
XX
PS Disclosure; Fig 3; 86pp; English.
XX
CC The present invention relates to human DESC1-like serine proteases and
CC polynucleotides encoding such proteins. DESC1-like serine proteases are
CC useful for treating a DESC1-like serine protease dysfunction related
CC disease conditions such as cancer, chronic obstructive pulmonary disease
CC (COPD), cardiovascular diseases (e.g., myocardial infarction, congestive
CC heart failure, ischaemic diseases of heart, all kinds of atrial and
CC ventricular arrhythmias, hypertensive vascular diseases and peripheral
CC vascular diseases) and peripheral or central nervous system diseases.
CC They are also useful in diagnostic assays for detecting diseases and
CC abnormalities or susceptibility to diseases and abnormalities related
CC to the presence of mutations in the nucleic acid sequences which encode
CC the enzyme. The present sequence is human DESC1-like serine protease
CC homologue.
XX
SQ Sequence 422 AA;

Query Match 99.6%; Score 2255; DB 23; Length 422;
Best Local Similarity 99.5%; Pred. No. 1.1e-178;
Matches 420; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
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Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
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Db     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 240

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
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Db     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
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Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420

Qy     421 GI 422
            ||
Db     421 GI 422


RESULT 3
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ID   AAY99414 standard; Protein; 423 AA.
XX
AC   AAY99414;
XX
DT   08-AUG-2000  (first entry)
XX
DE   Human PRO1461 (UNQ742) amino acid sequence SEQ ID NO:269.
XX
KW   Human; PRO polypeptide; membrane bound protein; receptor; diagnosis;
KW   transmembrane; secretion; immunoadhesion; pharmaceutical; screening.
XX
OS   Homo sapiens.
XX
PN   WO200012708-A2.
XX
PD   09-MAR-2000.
XX
PF   01-SEP-1999;   99WO-US20111.
XX
PR   01-SEP-1998;   98US-0098716.
PR   01-SEP-1998;   98US-0098749.
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PR   02-SEP-1998;   98US-0098821.
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PR   09-SEP-1998;   98US-0099536.
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PR   17-NOV-1998;   98US-0108802.
PR   17-NOV-1998;   98US-0108806.
PR   17-NOV-1998;   98US-0108807.
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PR   18-NOV-1998;   98US-0108904.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker K,  Goddard A,  Gurney AL,  Smith V,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2000-237871/20.
DR   N-PSDB; AAA37096.
XX
PT   New mammalian DNA sequences encoding transmembrane, receptor or
PT   secreted PRO polypeptides, useful for screening of potential peptide or
PT   small molecule inhibitors of the relevant receptor/ligand interactions
XX
PS   Claim 12; Fig 150; 773pp; English.
XX
CC   AAA37022 to AAA37144 encode the new isolated human transmembrane,
CC   receptor or secreted PRO polypeptides given in AAY99340 to AAY99462. The
CC   transmembrane and receptor PRO proteins can be used for screening of
CC   potential peptide or small molecule inhibitors of the relevant
CC   receptor/ligand interactions. The polypeptides and nucleotide sequences
CC   encoding then have various industrial applications, including uses as
CC   pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent
CC   PCR primers and hybridisation probes used in the isolation of the PRO
CC   polypeptides from the present invention.
XX
SQ   Sequence   423 AA;

  Query Match             99.6%;  Score 2255;  DB 21;  Length 423;
  Best Local Similarity   99.5%;  Pred. No. 1.1e-178;
  Matches  420;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
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Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
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Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           |||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 4
```

```
AAU29183
ID   AAU29183 standard; Protein; 423 AA.
XX
AC   AAU29183;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human PRO polypeptide sequence #160.
XX
KW   PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep;
KW   dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha;
KW   blood; chondrocyte cell; cell proliferation; cell differentiation; colon;
KW   adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200168848-A2.
XX
PD   20-SEP-2001.
XX
PF   28-FEB-2001; 2001WO-US06520.
XX
PR   01-MAR-2000; 2000WO-US05601.
PR   02-MAR-2000; 2000WO-US05841.
PR   03-MAR-2000; 2000US-187202P.
PR   06-MAR-2000; 2000US-186968P.
PR   14-MAR-2000; 2000US-189320P.
PR   14-MAR-2000; 2000US-189328P.
PR   15-MAR-2000; 2000WO-US06884.
PR   21-MAR-2000; 2000US-190828P.
PR   21-MAR-2000; 2000US-191007P.
PR   21-MAR-2000; 2000US-191048P.
PR   21-MAR-2000; 2000US-191314P.
PR   28-MAR-2000; 2000US-192655P.
PR   29-MAR-2000; 2000US-193032P.
PR   29-MAR-2000; 2000US-193053P.
PR   30-MAR-2000; 2000WO-US08439.
PR   04-APR-2000; 2000US-194449P.
PR   04-APR-2000; 2000US-194647P.
PR   11-APR-2000; 2000US-195975P.
PR   11-APR-2000; 2000US-196000P.
PR   11-APR-2000; 2000US-196187P.
PR   11-APR-2000; 2000US-196690P.
PR   11-APR-2000; 2000US-196820P.
PR   18-APR-2000; 2000US-198121P.
PR   18-APR-2000; 2000US-198585P.
PR   25-APR-2000; 2000US-199397P.
PR   25-APR-2000; 2000US-199550P.
PR   25-APR-2000; 2000US-199654P.
PR   03-MAY-2000; 2000US-201516P.
PR   17-MAY-2000; 2000WO-US13705.
PR   22-MAY-2000; 2000WO-US14042.
PR   30-MAY-2000; 2000WO-US14941.
PR   02-JUN-2000; 2000WO-US15264.
PR   05-JUN-2000; 2000US-209832P.
PR   28-JUL-2000; 2000WO-US20710.
PR   22-AUG-2000; 2000US-0644848.
PR   24-AUG-2000; 2000WO-US23328.
PR   08-NOV-2000; 2000WO-US30952.
PR   01-DEC-2000; 2000WO-US32678.
PR   20-DEC-2000; 2000WO-US34956.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2001-602746/68.
DR   N-PSDB; AAS46084.
XX
PT   Novel nucleic acids encoding PRO polypeptides, used to diagnose the
PT   presence of tumours, such as prostate and breast tumours, in mammals and
PT   to screen for modulators of the compounds -
```

```
XX
PS   Claim 11; Fig 320; 774pp; English.
XX
CC   Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention.
CC   The PRO polypeptides and their associated nucleic acids can be used to
CC   detect the presence of a tumour in a mammal by comparing the level of
CC   expression of a PRO polypeptide in a test sample of cells from the animal
CC   and a control sample of normal cells, whereby a higher level of
CC   expression in the test sample indicates the presence of a tumour in the
CC   mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats
CC   and rabbits but are preferably human. The polypeptides can be used to
CC   stimulate tumour necrosis factor (TNF) alpha release from human blood,
CC   when contacted with it. A specific polypeptide can be used to stimulate
CC   the proliferation or differentiation of chondrocyte cells. The PRO
CC   proteins can be used to determine the presence of tumours and also
CC   susceptibility to tumour development, particularly adrenal, lung, colon,
CC   breast, prostate, rectal, cervical, or liver tumours, in mammalian
CC   subjects. The oligonucleotide probes specific for the PRO nucleic acids
CC   can be used for genetic analysis of individuals with genetic disorders.
XX
SQ   Sequence   423 AA;

  Query Match             99.6%;  Score 2255;  DB 22;  Length 423;
  Best Local Similarity   99.5%;  Pred. No. 1.1e-178;
  Matches  420;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||:|||||||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 5
AAU01344
ID   AAU01344 standard; Protein; 423 AA.
XX
AC   AAU01344;
XX
DT   18-JUL-2001  (first entry)
XX
DE   Human TANGO 361 amino acid sequence.
XX
KW   Human; TANGO 361; transmembrane protein; diagnostic; asthma;
KW   immunological disorder; arthritis; graft rejection; renal disorder;
KW   acquired immunodeficiency syndrome; inflammatory disorders; psoriasis;
KW   AIDS; embryonic disorder; brain; cerebral oedema; ischaemia; tumour;
KW   prostate; cerebrovascular disease; pituitary; Cushing's disease;
KW   neurodegenerative disease; Parkinson's disease.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..35
FT                   /note= "Signal peptide"
FT   Protein         36..423
FT                   /note= "Mature TANGO 361"
FT   Domain          36..216
FT                   /note= "Cytoplasmic domain"
FT   Modified-site   61..63
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   75..78
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   80..82
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   127..130
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   159..161
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   166..169
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   168..171
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   179..184
FT                   /note= "N-myristylation site"
FT   Modified-site   196..199
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   180..182
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   189..191
FT                   /note= "Protein kinase C phosphorylation site"
FT   Domain          192..417
FT                   /note= "Serine protease domain"
FT   Modified-site   213..218
FT                   /note= "N-myristylation site"
FT   Modified-site   214..216
FT                   /note= "Protein kinase C phosphorylation site"
FT   Domain          217..234
FT                   /note= "Transmembrane domain"
FT   Modified-site   223..226
FT                   /note= "Asn is N-glycosylated"
FT   Active-site     228..233
FT                   /note= "Serine protease, histidine active site
FT                         consensus sequence"
FT   Domain          235..423
FT                   /note= "Extracellular domain"
FT   Modified-site   236..238
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   250..252
FT                   /note= "Protein kinase C phosphorylation site"
FT   Modified-site   279..282
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   317..322
FT                   /note= "N-myristylation site"
FT   Modified-site   335..338
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   341..344
FT                   /note= "Casein kinase II phosphorylation site"
FT   Modified-site   353..355
FT                   /note= "Protein kinase C phosphorylation site"
FT   Binding-site    359..366
FT                   /note= "ATP/GTP binding site motif"
FT   Modified-site   360..365
FT                   /note= "N-myristylation site"
FT   Active-site     371..375
FT                   /note= "Serine protease, serine active site
FT                         consensus sequence"
FT   Modified-site   418..420
FT                   /note= "Protein kinase C phosphorylation site"
XX
```

```
PN   WO200121631-A2.
XX
PD   29-MAR-2001.
XX
PF   20-SEP-2000; 2000WO-US25982.
XX
PR   20-SEP-1999;   99US-0399723.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Kirst SJ,  Sharp JD,  Fraser CC,  Barnes T,  Kingsbury G;
XX
DR   WPI; 2001-211461/21.
DR   N-PSDB; AAS02070.
XX
PT   New nucleic acid encoding INTERCEPT 307, MANGO 511, TANGO 351, TANGO
PT   361, TANGO 499 or TANGO 509 secreted or transmembrane protein, useful
PT   for the diagnosis and treatment of arthritis, psoriasis and Parkinson's
PT   disease -
XX
PS   Claim 8; Fig 13; 362pp; English.
XX
CC   The sequence represents the amino acid sequence of human TANGO 361
CC   transmembrane protein. The nucleic acid and polypeptide sequences
CC   are useful for the diagnosis, prognosis and treatment of immunological
CC   disorders (e.g. arthritis, graft rejection and acquired immunodeficiency
CC   syndrome), inflammatory disorders (e.g. psoriasis and asthma), renal
CC   disorders, embryonic disorders, brain-related disorders (e.g. cerebral
CC   oedema), cerebrovascular diseases (e.g. ischaemia), tumours, prostate-
CC   related disorders, pituitary-related disorders (e.g. Cushing's disease)
CC   and neurodegenerative diseases (e.g. Parkinson's disease).
XX
SQ   Sequence   423 AA;

  Query Match             99.6%;  Score 2255;  DB 22;  Length 423;
  Best Local Similarity   99.5%;  Pred. No. 1.1e-178;
  Matches  420;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 6
AAB87578
ID   AAB87578 standard; Protein; 423 AA.
XX
AC   AAB87578;
XX
DT   15-MAY-2001  (first entry)
XX
DE   Human PRO1461.
XX
KW   Human; PRO protein; mapping.
XX
OS   Homo sapiens.
XX
PN   WO200116318-A2.
XX
PD   08-MAR-2001.
XX
PF   24-AUG-2000; 2000WO-US23328.
XX
PR   01-SEP-1999;   99WO-US20111.
PR   15-SEP-1999;   99WO-US21090.
PR   07-DEC-1999;   99US-0169495.
PR   09-DEC-1999;   99US-0170262.
PR   11-JAN-2000; 2000US-0175481.
PR   18-FEB-2000; 2000WO-US04341.
PR   18-FEB-2000; 2000WO-US04342.
PR   22-FEB-2000; 2000WO-US04414.
PR   01-MAR-2000; 2000WO-US05601.
PR   03-MAR-2000; 2000US-0187202.
PR   25-APR-2000; 2000US-0199397.
PR   22-MAY-2000; 2000WO-US14042.
PR   05-JUN-2000; 2000US-0209832.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi CJ,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2001-183260/18.
DR   N-PSDB; AAF92110.
XX
PT   Eighty four nucleic acids encoding PRO polypeptides, useful in
PT   molecular biology, including use as hybridization probes, and in
PT   chromosome and gene mapping. -
XX
PS   Claim 12; Fig 106; 278pp; English.
XX
CC   The present sequence is a human PRO polypeptide (secreted and
CC   transmembrane). The PRO protein, and PRO agonists, PRO antagonists or
CC   anti-PRO antibodies are useful for preparation of a medicament useful in
CC   the treatment of a condition which is responsive to the PRO protein,
CC   agonists, antagonists or anti-PRO antibodies. The PRO protein may also be
CC   employed as molecular weight markers for protein electrophoresis. The PRO
CC   coding sequence has applications in molecular biology, including use as
CC   hybridisation probes, and in chromosome and gene mapping.
XX
SQ   Sequence   423 AA;

  Query Match             99.6%;  Score 2255;  DB 22;  Length 423;
  Best Local Similarity   99.5%;  Pred. No. 1.1e-178;
  Matches  420;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181
```

```
Qy    181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
          ||||||||||||||||||||||||||||||||| |||||||||||||||||||||||||
Db    182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy    241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy    301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||
Db    302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy    361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy    421 GI 422
          ||
Db    422 GI 423
```

RESULT 7
AAB66163
ID AAB66163 standard; protein; 423 AA.
XX
AC AAB66163;
XX
DT 02-APR-2001 (first entry)
XX
DE Protein of the invention #75.
XX
KW Secreted; transmembrane; gene therapy.
XX
OS Unidentified.
XX
PN WO200078961-A1.
XX
PD 28-DEC-2000.
XX
PF 18-FEB-2000; 2000WO-US04342.
XX
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 29-OCT-1999; 99US-0162506.
PR 30-NOV-1999; 99WO-US28313.
PR 02-DEC-1999; 99WO-US28551.
PR 16-DEC-1999; 99WO-US30095.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00376.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2001-071395/08.
XX
PT Secreted and transmembrane proteins and nucleic acids designated PRO,
PT useful as hybridization probes, in chromosome and gene mapping and gene
PT therapy -
XX
PS Claim 1; Fig 150; 787pp; English.
XX
CC The present invention relates to secreted and transmembrane proteins.
CC These proteins and the DNA encoding them may be used as hybridization
CC probes, in chromosome and gene mapping and in the generation of
CC anti-sense RNA and DNA. They may also be used used to generate either
CC transgenic animals or knockout animals which are in turn useful for
CC development and screening of therapeutically useful reagents.
CC The nucleic acids may also be used in gene therapy.
XX
SQ Sequence 423 AA;

```
  Query Match             99.6%;  Score 2255;  DB 22;  Length 423;
  Best Local Similarity   99.5%;  Pred. No. 1.1e-178;
  Matches  420;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy     61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy    121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy    181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
          |||||||||||||||||||||||||||||||| |||||||||||||||||||||||||||
Db    182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy    241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy    301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||
Db    302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy    361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy    421 GI 422
          ||
Db    422 GI 423
```

RESULT 8
AAU01400
ID AAU01400 standard; Protein; 423 AA.
XX
AC AAU01400;
XX
DT 18-JUL-2001 (first entry)
XX
DE Human TANGO 361, variant #2 amino acid sequence.
XX
KW Human; TANGO 361; transmembrane protein; diagnostic; asthma;
KW immunological disorder; arthritis; graft rejection; renal disorder;
KW acquired immunodeficiency syndrome; inflammatory disorders; psoriasis;
KW AIDS; embryonic disorder; brain; cerebral oedema; ischaemia; tumour;
KW prostate; cerebrovascular disease; pituitary; Cushing's disease;
KW neurodegenerative disease; Parkinson's disease.
XX
OS Homo sapiens.
XX
PN WO200121631-A2.
XX
PD 29-MAR-2001.
XX
PF 20-SEP-2000; 2000WO-US25982.
XX
PR 20-SEP-1999; 99US-0399723.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Kirst SJ, Sharp JD, Fraser CC, Barnes T, Kingsbury G;
XX
DR WPI; 2001-211461/21.

```
DR   N-PSDB; AAS02111.
XX
PT   New nucleic acid encoding INTERCEPT 307, MANGO 511, TANGO 351, TANGO
PT   361, TANGO 499 or TANGO 509 secreted or transmembrane protein, useful
PT   for the diagnosis and treatment of arthritis, psoriasis and Parkinson's
PT   disease -
XX
PS   Disclosure; Page 325-326; 362pp; English.
XX
CC   The sequence represents the amino acid sequence of human TANGO 361
CC   variant #2 transmembrane protein. The nucleic acid and polypeptide
CC   sequences are useful for the diagnosis, prognosis and treatment of
CC   immunological disorders (e.g. arthritis, graft rejection and acquired
CC   immunodeficiency syndrome), inflammatory disorders (e.g. psoriasis and
CC   asthma), renal disorders, embryonic disorders, brain-related disorders
CC   (e.g. cerebral oedema), cerebrovascular diseases (e.g. ischaemia),
CC   tumours, prostate-related disorders, pituitary-related disorders (e.g.
CC   Cushing's disease) and neurodegenerative diseases (e.g. Parkinson's
CC   disease).
XX
SQ   Sequence   423 AA;

  Query Match            99.5%;  Score 2252;  DB 22;  Length 423;
  Best Local Similarity  99.3%;  Pred. No. 2e-178;
  Matches  419;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           |||||||:|||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVKARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 9
AAU01401
ID   AAU01401 standard; Protein; 423 AA.
XX
AC   AAU01401;
XX
DT   18-JUL-2001  (first entry)
XX
DE   Human TANGO 361, variant #3 amino acid sequence.
XX
KW   Human; TANGO 361; transmembrane protein; diagnostic; asthma;
KW   immunological disorder; arthritis; graft rejection; renal disorder;
KW   acquired immunodeficiency syndrome; inflammatory disorders; psoriasis;
KW   AIDS; embryonic disorder; brain; cerebral oedema; ischaemia; tumour;
KW   prostate; cerebrovascular disease; pituitary; Cushing's disease;
KW   neurodegenerative disease; Parkinson's disease.
XX
OS   Homo sapiens.
XX
PN   WO200121631-A2.
XX
PD   29-MAR-2001.
XX
PF   20-SEP-2000; 2000WO-US25982.
XX
PR   20-SEP-1999;  99US-0399723.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Kirst SJ,  Sharp JD,  Fraser CC,  Barnes T,  Kingsbury G;
XX
DR   WPI; 2001-211461/21.
DR   N-PSDB; AAS02112.
XX
PT   New nucleic acid encoding INTERCEPT 307, MANGO 511, TANGO 351, TANGO
PT   361, TANGO 499 or TANGO 509 secreted or transmembrane protein, useful
PT   for the diagnosis and treatment of arthritis, psoriasis and Parkinson's
PT   disease -
XX
PS   Disclosure; Page 329-331; 362pp; English.
XX
CC   The sequence represents the amino acid sequence of human TANGO 361
CC   variant #3 transmembrane protein. The nucleic acid and polypeptide
CC   sequences are useful for the diagnosis, prognosis and treatment of
CC   immunological disorders (e.g. arthritis, graft rejection and acquired
CC   immunodeficiency syndrome), inflammatory disorders (e.g. psoriasis and
CC   asthma), renal disorders, embryonic disorders, brain-related disorders
CC   (e.g. cerebral oedema), cerebrovascular diseases (e.g. ischaemia),
CC   tumours, prostate-related disorders, pituitary-related disorders (e.g.
CC   Cushing's disease) and neurodegenerative diseases (e.g. Parkinson's
CC   disease).
XX
SQ   Sequence   423 AA;

  Query Match            99.5%;  Score 2252;  DB 22;  Length 423;
  Best Local Similarity  99.3%;  Pred. No. 2e-178;
  Matches  419;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           ||||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVRARKRVCWEPWVIGLVIYISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
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          ||
Db    422 GI 423


RESULT 10
AAU01402
ID   AAU01402 standard; Protein; 423 AA.
XX
AC   AAU01402;
XX
DT   18-JUL-2001  (first entry)
XX
DE   Human TANGO 361, variant #4 amino acid sequence.
XX
KW   Human; TANGO 361; transmembrane protein; diagnostic; asthma;
KW   immunological disorder; arthritis; graft rejection; renal disorder;
KW   acquired immunodeficiency syndrome; inflammatory disorders; psoriasis;
KW   AIDS; embryonic disorder; brain; cerebral oedema; ischaemia; tumour;
KW   prostate; cerebrovascular disease; pituitary; Cushing's disease;
KW   neurodegenerative disease; Parkinson's disease.
XX
OS   Homo sapiens.
XX
PN   WO200121631-A2.
XX
PD   29-MAR-2001.
XX
PF   20-SEP-2000; 2000WO-US25982.
XX
PR   20-SEP-1999;   99US-0399723.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Kirst SJ,  Sharp JD,  Fraser CC,  Barnes T,  Kingsbury G;
XX
DR   WPI; 2001-211461/21.
DR   N-PSDB; AAS02113.
XX
PT   New nucleic acid encoding INTERCEPT 307, MANGO 511, TANGO 351, TANGO
PT   361, TANGO 499 or TANGO 509 secreted or transmembrane protein, useful
PT   for the diagnosis and treatment of arthritis, psoriasis and Parkinson's
PT   disease -
XX
PS   Disclosure; Page 334-335; 362pp; English.
XX
CC   The sequence represents the amino acid sequence of human TANGO 361
CC   variant #4 transmembrane protein. The nucleic acid and polypeptide
CC   sequences are useful for the diagnosis, prognosis and treatment of
CC   immunological disorders (e.g. arthritis, graft rejection and acquired
CC   immunodeficiency syndrome), inflammatory disorders (e.g. psoriasis and
CC   asthma), renal disorders, embryonic disorders, brain-related disorders
CC   (e.g. cerebral oedema), cerebrovascular diseases (e.g. ischaemia),
CC   tumours, prostate-related disorders, pituitary-related disorders (e.g.
CC   Cushing's disease) and neurodegenerative diseases (e.g. Parkinson's
CC   disease).
XX
SQ   Sequence   423 AA;

  Query Match             99.5%;  Score 2252;  DB 22;  Length 423;
  Best Local Similarity   99.3%;  Pred. No. 2e-178;
  Matches  419;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           |||||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVVRARKRVCWEPWVIGLVIFITLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||||| |||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 11
AAU01399
ID   AAU01399 standard; Protein; 423 AA.
XX
AC   AAU01399;
XX
DT   18-JUL-2001  (first entry)
XX
DE   Human TANGO 361, variant #1 amino acid sequence.
XX
KW   Human; TANGO 361; transmembrane protein; diagnostic; asthma;
KW   immunological disorder; arthritis; graft rejection; renal disorder;
KW   acquired immunodeficiency syndrome; inflammatory disorders; psoriasis;
KW   AIDS; embryonic disorder; brain; cerebral oedema; ischaemia; tumour;
KW   prostate; cerebrovascular disease; pituitary; Cushing's disease;
KW   neurodegenerative disease; Parkinson's disease.
XX
OS   Homo sapiens.
XX
PN   WO200121631-A2.
XX
PD   29-MAR-2001.
XX
PF   20-SEP-2000; 2000WO-US25982.
XX
PR   20-SEP-1999;   99US-0399723.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Kirst SJ,  Sharp JD,  Fraser CC,  Barnes T,  Kingsbury G;
XX
DR   WPI; 2001-211461/21.
DR   N-PSDB; AAS02110.
XX
PT   New nucleic acid encoding INTERCEPT 307, MANGO 511, TANGO 351, TANGO
PT   361, TANGO 499 or TANGO 509 secreted or transmembrane protein, useful
PT   for the diagnosis and treatment of arthritis, psoriasis and Parkinson's
PT   disease -
XX
PS   Disclosure; Page 317-320; 362pp; English.
XX
CC   The sequence represents the amino acid sequence of human TANGO 361
CC   variant #1 transmembrane protein. The nucleic acid and polypeptide
CC   sequences are useful for the diagnosis, prognosis and treatment of
CC   immunological disorders (e.g. arthritis, graft rejection and acquired
CC   immunodeficiency syndrome), inflammatory disorders (e.g. psoriasis and
CC   asthma), renal disorders, embryonic disorders, brain-related disorders
CC   (e.g. cerebral oedema), cerebrovascular diseases (e.g. ischaemia),
CC   tumours, prostate-related disorders, pituitary-related disorders (e.g.
CC   Cushing's disease) and neurodegenerative diseases (e.g. Parkinson's
CC   disease).
```

```
XX
SQ   Sequence   423 AA;

  Query Match            99.5%;  Score 2251;  DB 22;  Length 423;
  Best Local Similarity  99.3%;  Pred. No. 2.4e-178;
  Matches  419;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           |||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2 MYRPDVARARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 61

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      62 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 121

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     122 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 181

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     182 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 241

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     242 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 301

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           |||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||
Db     302 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 361

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     362 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 421

Qy     421 GI 422
           ||
Db     422 GI 423


RESULT 12
AAY94709
ID   AAY94709 standard; Protein; 422 AA.
XX
AC   AAY94709;
XX
DT   01-DEC-2000  (first entry)
XX
DE   Human DESC1 protein variant #2.
XX
KW   Human; DESC1; squamous cell carcinoma; prostate cancer; head; neck;
KW   diagnosis; chromosome 4q12-4q13.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Region          19..37
FT                   /note= "Hydrophobic transmembrane region"
FT   Cleavage-site   190..191
FT   Domain          191..422
FT                   /note= "Catalytic domain"
XX
PN   WO200050061-A1.
XX
PD   31-AUG-2000.
XX
PF   11-NOV-1999;   99WO-IB01818.
XX
PR   26-FEB-1999;   99US-0122747.
XX
PA   (OHIS ) UNIV OHIO STATE RES FOUND.
XX
PI   Lang JC;
XX
DR   WPI; 2000-572035/53.
DR   N-PSDB; AAA28126.
XX
PT   Diagnosing squamous cell carcinoma or prostate cancer especially
PT   squamous cell carcinomas of head and neck and tissues adjacent to such
PT   tumor tissue comprises assaying for the expression of DESC1 gene  -
XX
PS   Claim 8; Fig 1B; 32pp; English.
XX
CC   This invention relates to a method for the diagnosis of squamous cell
CC   carcinoma or prostate cancer, comprising assaying for the expression of
CC   the DESC1 gene in the tissue sample from a subject. The present sequence
CC   represents the human DESC1 protein variant 2. The human DESC1 gene is
CC   located on chromosome 4q12-4q13, and the DESC1 protein has a predicted
CC   molecular weight of 44kD. The DESC1 gene is expressed in significant
CC   levels in epithelial derived tissue of the head, neck, oral mucosa,
CC   tonsils, prostate, testes and skin in healthy individuals. Tissue samples
CC   from patients with squamous cell carcinoma (particularly of the head and
CC   neck) do not express, or expresses at low levels the DESC1 gene.
CC   Expression of the DESC1 gene is reduced or absent in prostate cancer.
CC   The DESC1 protein shows homology to serine protease family members. The
CC   methods of the invention can be used to diagnose squamous cell carcinoma
CC   or prostate cancer in a tissue sample of a subject. The DESC1 cDNA is
CC   useful for producing DESC1 protein and for designing hybridization probes
CC   for isolating and identifying cDNA clones and genomic clones encoding the
CC   protein or its allelic forms.
XX
SQ   Sequence   422 AA;

  Query Match            98.8%;  Score 2235;  DB 21;  Length 422;
  Best Local Similarity  98.8%;  Pred. No. 5.2e-177;
  Matches  417;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           |||||||||||||||||||||:|||||||||||:||||||||||||||||||||||||||||
Db       1 MYRPDVVRARKRVCWEPWVIGLVMFISLIVLAVCIGVTVHYVRYNQKKTYNYYSTLSFTT 60

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 240

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           |||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||||
Db     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 360

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           ||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSSGDECAKPNKPGVYTRVTALRDWITSKT 420

Qy     421 GI 422
           ||
Db     421 GI 422


RESULT 13
AAE01946
ID   AAE01946 standard; Protein; 422 AA.
XX
AC   AAE01946;
XX
```

DT 31-JUL-2001 (first entry)
XX
DE Human endotheliase 1 protein.
XX
KW Human; endotheliase 1; protease domain; cytostatic; vulnerary; wound;
KW nootropic; periodontitis; dermatological disorder; gene therapy; scar;
KW angiogenesis; cardiovascular disorder; psoriasis; neovascular disease;
KW chronic inflammatory disease; occular disorder; circulatory disorder;
KW crest syndrome; atherosclerosis; haemangiomatosis; diabetes mellitus;
KW liver cirrhosis, osteoradionecrosis, systemic sclerosis; oesophageal;
KW inflammatory bowel disease; fracture; rheumatoid arthritis; retinopathy;
KW systemic vasculitis; scleroderma; neoplasm; ulcer; burn; DESC1 gene.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 24
FT /label= Unknown
FT /note= "Encoded by ATN"
FT Misc-difference 37
FT /label= Unknown
FT /note= "Encoded by NTC"
FT Misc-difference 393
FT /label= Unknown
FT /note= "Encoded by TNG"
FT Domain 190..422
FT /label= Protease_domain
XX
PN WO200136604-A2.
XX
PD 25-MAY-2001.
XX
PF 17-NOV-2000; 2000WO-US31803.
XX
PR 18-NOV-1999; 99US-0166391.
PR 22-SEP-2000; 2000US-0234840.
XX
PA (CORV-) CORVAS INT INC.
XX
PI Madison EL, Ong EO;
XX
DR WPI; 2001-336001/35.
DR N-PSDB; AAD05812.
XX
PT New nucleic acid encoding a protein comprising endotheliase activity
PT useful in the prevention and treatment of e.g. vascular malformations,
PT cardiovascular disorders, and chronic inflammatory disease -
XX
PS Claim 4; Page 149-151; 152pp; English.
XX
CC The present sequence is human endotheliase 1 protein which is encoded by
CC DESC1 gene. DESC1 is used for the diagnosis of squamous cell carcinoma or
CC prostate cancer.
CC The invention relates to an endotheliase protein, endotheliase protease
CC domain and their corresponding nucleic acid molecules. An endotheliase
CC protein or protease domain of it is useful for the treatment and
CC diagnosis of disorders associated with aberrant angiogenesis or undesired
CC neovascularisation. The undesired angiogenesis is associated with
CC disorders selected from solid neoplasm, vascular malformations and
CC cardiovascular disorders such as angiofibroma, angiolipoma,
CC atherosclerosis, restenosis/reperfusion injury, arteriovenous
CC malformations, haemangiomatosis and vascular adhesions, dyschondroplasia
CC with vascular hamartomas (Fafucci's syndrome), hereditary haemorrhagic
CC telangiectasia (Rendu-Osler-Weber syndrome) and Von Hipple Lindau
CC syndrome, chronic inflammatory diseases such as diabetes mellitus,
CC haemophiliac joints, inflammatory bowel disease, nonhealing fractures,
CC periodontitis, psoriasis, rheumatoid arthritis, venous stasis ulcers,
CC granulations-burns, hypertrophic scars, liver cirrhosis,
CC osteoradionecrosis, postoperative adhesion, pyogenic granuloma and
CC systemic sclerosis and aberrant wound repairs, circulatory disorders
CC Raynaud's phenomenon, crest syndromes such as calcinosis, oesophageal,
CC dyomotiloty, sclerodactyly and teangiectasis, dermatological disorders
CC such as systemic vasculitis, scleroderma, pyoderma gangrenosum,
CC vasculopathy, venous, arterial ulcers, Sturge-Weber syndrome, Port-wine
CC stains, blue rubber bleb nevus syndrome, Klippel-Trenaunay-Weber syndrome
CC and Osler-Weber-Rendu syndrome and occular disorders such as blindness
CC caused by occular neovascular disease, corneal graft neovascularisation,
CC macular degeneration, retinopathy of prematurity, retrolental
CC fibroplasia and corneal neovascularisation. The nucleic acids of the
CC invention are also used in gene therapy. The invention also provides
CC method for screening compounds that modulate angiogenesis.
XX
SQ Sequence 422 AA;

Query Match 98.6%; Score 2232; DB 22; Length 422;
Best Local Similarity 98.8%; Pred. No. 9.2e-177;
Matches 417; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

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Qy       1 MYRPDVVRARKRVCWEPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTT 60
           |||||||||||||||||||||| |||||||||||| ||||||||||||||||||||||
Db       1 MYRPDVVRARKRVCWEPWVIGLVXFISLIVLAVCIGXTVHYVRYNQKKTYNYYSTLSFTT 60

Qy      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 DKLYAEFGREASNNFTEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLL 120

Qy     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 ICRFHSTEDPETVDKIVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTR 180

Qy     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPA 240
           |||||||||||||||||||||||||||||||| |||||||||||||||||||||||||||
Db     181 RSKTLGQSLRIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPA 240

Qy     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 RWTASFGVTIKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDA 300

Qy     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGS 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||:|||||
Db     301 SYEFQPGDVMFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGS 360

Qy     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKT 420
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db     361 LEGKTDACQGDSGGPLVSSDARDIWYLAGIVSXGDECAKPNKPGVYTRVTALRDWITSKT 420

Qy     421 GI 422
           ||
Db     421 GI 422
```

RESULT 14
AAO21900
ID AAO21900 standard; Protein; 407 AA.
XX
AC AAO21900;
XX
DT 13-SEP-2002 (first entry)
XX
DE Homologous human protease protein.
XX
KW Human protease; transgenic animal; transgenic non-human animal; enzyme;
KW tissue typing.
XX
OS Homo sapiens.
XX
PN WO200226947-A2.
XX
PD 04-APR-2002.
XX
PF 26-SEP-2001; 2001WO-US29960.
XX
PR 27-SEP-2000; 2000US-235557P.
PR 13-DEC-2000; 2000US-0734675.
XX
PA (PEKE) PE CORP NY.

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XX
PI   Webster M,  Ketchum KA,  Di Francesco V,  Beasley EM;
XX
DR   WPI; 2002-499867/53.
XX
PT   Novel peptide designated as human protease useful as target for
PT   diagnosing a disease or predisposition to the disease mediated by the
PT   peptide  -
XX
PS   Disclosure; Fig 2; 102pp; English.
XX
CC   The invention relates to a novel isolated human protease consisting or
CC   comprising of an amino acid sequence containing 405 amino acids fully
CC   defined in the specification, its allelic variant, orthologue or
CC   fragment. The human protease is useful for identifying a modulator of it,
CC   by contacting the human protease with an agent and determining if the
CC   agent has modulated the function, expression or activity of the human
CC   protease. A pharmaceutical composition of the invention is useful for
CC   treating a disease, or condition mediated by human protease. A human
CC   protease antibody is useful in tissue typing where a specific protein has
CC   been correlated with expression in specific tissue, antibodies that are
CC   specific for this protein which can be useful to identify a tissue type.
CC   The polynucleotide encoding the human protease is useful for constructing
CC   transgenic animals expressing the polynucleotide and peptides. A
CC   genetically engineered host cell is useful in producing a transgenic non-
CC   human animal, e.g. rodent such as rat or mouse, in which one or more of
CC   the cells of the animal include a transgene. This sequence represents a
CC   homologous protein of the human protease of the invention.
XX
SQ   Sequence   407 AA;

  Query Match             95.8%;  Score 2169;  DB 23;  Length 407;
  Best Local Similarity   99.5%;  Pred. No. 1.5e-171;
  Matches  405;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      16 EPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTTDKLYAEFGREASNNF 75
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 EPWVIGLVIFISLIVLAVCIGLTVHYVRYNQKKTYNYYSTLSFTTDKLYAEFGREASNNF 60

Qy      76 TEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLLICRFHSTEDPETVDK 135
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 TEMSQRLESMVKNAFYKSPLREEFVKSQVIKFSQQKHGVLAHMLLICRFHSTEDPETVDK 120

Qy     136 IVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTRRSKTLGQSLRIVGGT 195
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 IVQLVLHEKLQDAVGPPKVDPHSVKIKKINKTETDSYLNHCCGTRRSKTLGQSLRIVGGT 180

Qy     196 EVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPARWTASFGVTIKPSKM 255
           |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||
Db     181 EVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPARWTASFGVTIKPSKM 240

Qy     256 KRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDASYEFQPGDVMFVTGF 315
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 KRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDASYEFQPGDVMFVTGF 300

Qy     316 GALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGSLEGKTDACQGDSGGP 375
           ||||||||||||||||||||||||||||||||||||:||||||||||||||||||||||||
Db     301 GALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGSLEGKTDACQGDSGGP 360

Qy     376 LVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKTGI 422
           |||||||||||||||||||||||||||||||||||||||||||||||
Db     361 LVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKTGI 407


RESULT 15
AAE01942
ID   AAE01942 standard; Protein; 233 AA.
XX
AC   AAE01942;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Human endotheliase 1 protease domain.
XX
KW   Human; endotheliase 1; protease domain; cytostatic; vulnerary; wound;
KW   nootropic; periodontitis; dermatological disorder; gene therapy; scar;
KW   angiogenesis; cardiovascular disorder; psoriasis; neovascular disease;
KW   chronic inflammatory disease; occular disorder; circulatory disorder;
KW   crest syndrome; atherosclerosis; haemangiomatosis; diabetes mellitus;
KW   liver cirrhosis, osteoradionecrosis, systemic sclerosis; oesophageal;
KW   inflammatory bowel disease; fracture; rheumatoid arthritis; retinopathy;
KW   systemic vasculitis; scleroderma; neoplasm; ulcer; burn.
XX
OS   Homo sapiens.
XX
PN   WO200136604-A2.
XX
PD   25-MAY-2001.
XX
PF   17-NOV-2000; 2000WO-US31803.
XX
PR   18-NOV-1999;  99US-0166391.
PR   22-SEP-2000; 2000US-0234840.
XX
PA   (CORV-) CORVAS INT INC.
XX
PI   Madison EL,  Ong EO;
XX
DR   WPI; 2001-336001/35.
DR   N-PSDB; AAD05795.
XX
PT   New nucleic acid encoding a protein comprising endotheliase activity
PT   useful in the prevention and treatment of e.g. vascular malformations,
PT   cardiovascular disorders, and chronic inflammatory disease -
XX
PS   Claim 4; Page 134-135; 152pp; English.
XX
CC   The present sequence is human endotheliase 1 protease domain.
CC   The invention relates to an endotheliase protein, endotheliase protease
CC   domain and their corresponding nucleic acid molecules. An endotheliase
CC   protein or protease domain of it is useful for the treatment and
CC   diagnosis of disorders associated with aberrant angiogenesis or undesired
CC   neovascularisation. The undesired angiogenesis is associated with
CC   disorders selected from solid neoplasm, vascular malformations and
CC   cardiovascular disorders such as angiofibroma, angiolipoma,
CC   atherosclerosis, restenosis/reperfusion injury, arteriovenous
CC   malformations, haemangiomatosis and vascular adhesions, dyschondroplasia
CC   with vascular hamartomas (Fafucci's syndrome), hereditary haemorrhagic
CC   telangiectasia (Rendu-Osler-Weber syndrome) and Von Hipple Lindau
CC   syndrome, chronic inflammatory diseases such as diabetes mellitus,
CC   haemophiliac joints, inflammatory bowel disease, nonhealing fractures,
CC   periodontitis, psoriasis, rheumatoid arthritis, venous stasis ulcers,
CC   granulations-burns, hypertrophic scars, liver cirrhosis,
CC   osteoradionecrosis, postoperative adhesion, pyogenic granuloma and
CC   systemic sclerosis and aberrant wound repairs, circulatory disorders
CC   Raynaud's phenomenon, crest syndromes such as calcinosis, oesophageal,
CC   dyomotiloty, sclerodactyly and teangiectasis, dermatological disorders
CC   such as systemic vasculitis, scleroderma, pyoderma gangrenosum,
CC   vasculopathy, venous, arterial ulcers, Sturge-Weber syndrome, Port-wine
CC   stains, blue rubber bleb nevus syndrome, Klippel-Trenaunay-Weber syndrome
CC   and Osler-Weber-Rendu syndrome and occular disorders such as blindness
CC   caused by occular neovascular disease, corneal graft neovascularisation,
CC   macular degeneration, retinopathy of prematurity, retrolental
CC   fibroplasia and corneal neovascularisation. The nucleic acids of the
CC   invention are also used in gene therapy. The invention also provides
CC   method for screening compounds that modulate angiogenesis.
XX
SQ   Sequence   233 AA;

  Query Match             55.8%;  Score 1263;  DB 22;  Length 233;
  Best Local Similarity   99.1%;  Pred. No. 9.8e-97;
  Matches  231;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     190 RIVGGTEVEEGEWPWQASLQWDGSHACGATLINATWLVSAAHCFTTYKNPARWTASFGVT 249
           |||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db       1 RIVGGTEVEEGEWPWQASLQWDGSHRCGATLINATWLVSAAHCFTTYKNPARWTASFGVT 60
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Qy     250 IKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDASYEFQPGDV 309
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 IKPSKMKRGLRRIIVHEKYKHPSHDYDISLAELSSPVPYTNAVHRVCLPDASYEFQPGDV 120

Qy     310 MFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRILCAGSLEGKTDACQ 369
           ||||||||||||||||||||||||||||||||||||||||||||:|||||||||||||||
Db     121 MFVTGFGALKNDGYSQNHLRQAQVTLIDATTCNEPQAYNDAITPRMLCAGSLEGKTDACQ 180

Qy     370 GDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKTGI 422
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181 GDSGGPLVSSDARDIWYLAGIVSWGDECAKPNKPGVYTRVTALRDWITSKTGI 233
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